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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CORSARO, NICK	
ART UNIT	**PAPER NUMBER**
2684	6

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/747,273	FISCHER ET AL.	
	Examiner	Art Unit	
	Nick Corsaro	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 10-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay et al. (5,299,198) in view of Hamilton-Piercy et al. (5,802,173).

Consider claim 10, Kay teaches a method of transmitting an RF signals between a base station and at least one remote unit (see abstract lines 1-5, and col. 1 lines 15-20). Kay teaches generating a digitized representation of the RF signal at the base station (see col. 6 lines 50-58, col. 7 lines 55-67, col. 8 lines 1-18, col. 9 lines 22-45, and col. and col. 9 lines 32-55, where Kay discusses modulated carriers between the base station and mobiles). Kay teaches the RF signal is a signal representing a plurality of outbound wireless transmissions for a set of channels (see col. 9 lines 22-67, and col. 10 lines 1-26, where Kay discusses QPSK modulation which is modulation of a digital signal onto an analog carrier by shifting the phase of the signal). Kay teaches transmitting the digitized representation to the remote unit (see col. 3 lines 35-67, col. 4 lines 1-20, col. 7 lines 55-67, col. 8 lines 1-18, col. 9 lines 22-45, col. 10 lines 62-67, and col. 11 lines 1-35, where Kay discusses a modulated carrier between the base stations and mobiles sending voice traffic to the mobiles in time slots).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose the RF signal is a combined analog signal representing a plurality of outbound wireless transmissions for a set of channels. Hamilton-Piercy teaches the RF signal is a combined analog signal representing a plurality of outbound wireless transmissions for a set of channels (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and have the RF signal is a combined analog signal representing a plurality of outbound wireless transmissions for a set of channels, as taught by Hamilton-Piercy, thus allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47).

Consider claim 14, Kay teaches a method of transmitting wireless transmissions between a base station and a remote unit (see abstract lines 1-5, and col. 1 lines 15-20). Kay teaches generating a set of modulated RF analog channel carriers representing outbound transmissions (see col. 3 lines 37-45, and col. 9 lines 22-45). Kay teaches each modulated channel carrier corresponds, in a one-to one relationship, to a channel in a set of channels used by the remote unit (see col. 3 lines 37-67, col. 4 lines 1-35, col. 9 lines 22-45, where Kay discusses assigning the mobile to a channel and time slot for the duration of a speech Burst, which may be in a different time slot and on a different carrier for the next burst). Kay teaches transmitting the set

of RF analog modulated channel carriers into as an RF signal (see col. 10 lines 2-27, col. 7 lines 55-67, col. 8 lines 1-20, col. 9 lines 22-45, and col. 12 lines 12-22, where Kay discusses generating between a base station transmitter and a mobile a RF channels, and time slotted channels destine for the mobiles, therefore, combined channels). Kay teaches generating a digitized representation of the combined RF signal at the base station and transmitting the digitized representation to the remote unit (see col. 10 lines 2-27, col. 7 lines 55-67, col. 8 lines 1-20, col. 9 lines 22-45, and col. 12 lines 12-22).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose combining the set of RF analog modulated channel carriers into a combined RF signal. Hamilton-Piercy teaches combining the set of RF analog modulated channel carriers into a combined RF signal (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and combine the set of RF analog modulated channel carriers into a combined RF signal, as taught by Hamilton-Piercy, thus allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47) .

Consider claim 18, Kay teaches a method of transmitting RF signals between a base station and a remote unit (see abstract lines 1-5, and col. 1 lines 15-20). Kay teaches receiving a plurality of outbound RF signals from a network, wherein the plurality of outbound RF signals correspond to a set of channels used by the remote unit (see col. 9 lines 22-45). Kay teaches generating an RF analog outbound channel carrier for each channel in the set of channels used by the remote unit (see col. 3 lines 38-50 and, col. 9 lines 22-45,). Kay teaches analog modulating each of the plurality of outbound RF signals onto a corresponding one of the RF analog outbound channel carriers (see col. 10 lines 2-30, where Kay discusses QPSK modulation which is modulating a digital signal onto an analog carrier). Kay teaches generating a plurality of RF analog modulated channel carriers (see col. 3 lines 35-67, col. 9 lines 22-45, and col. 4 lines 1-33). Kay teaches combining the plurality of RF anal modulated channel carriers into a combined RF signal; generating a digitized representation of the combined RF signal at the base station; and transmitting the digitized representation to the remote unit (col. 3 lines 35-67, col. 9 lines 22-45, and col. 4 lines 1-33, col. 7 lines 55-69, col. 8 lines 1-20, and col. 12 lines 10-21, where Kay discusses a base station communicating with many mobiles by modulating several RF carriers, to frequency and time shift channels and send them to the mobiles).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose combining the set of RF analog modulated channel carriers into a combined RF signal. Hamilton-Piercy teaches combining the set of RF analog modulated channel carriers into a combined RF signal (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-

67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and combine the set of RF analog modulated channel carriers into a combined RF signal, as taught by Hamilton-Piercy, thus allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47) .

Consider claim 19, Kay teaches a method of transmitting RF signals between a remote unit and a base station (see abstract lines 1-5, col. 1 lines 15-20, and col. 9 lines 22-45). Kay teaches receiving a plurality of inbound RF signals from a plurality of mobile units at the remote unit (see, figure 3, col. 9 lines 22-45, col. 10 lines 2-27, where Kay discusses that the remote transmitting units are connected to the control units and the MSC via T1, digital lines). Kay teaches combining the inbound RF signals into a combined RF signal (see col. 9 lines 22-45, col. 7 lines 55-67, and col. 8 lines 1-18). Kay teaches generating a digitized representation of the combined RF signal at the remote unit; and transmitting the digitized representation to the base station (see col. 3 lines 35-67, col. 4 lines 2-33, col. 9 lines 22-45, col. 7 lines 55-67, and col. 8 lines 1-20, where Kay discusses outbound and inbound traffic between mobiles and base radio equipment, MSC, utilizing time slots, on the RF carrier and T1 connections between the remote transmitters and the base stations).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose combining the set of RF analog modulated channel carriers into a combined RF signal. Hamilton-Piercy teaches combining the set of RF analog modulated channel carriers into a combined RF signal (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and combine the set of RF analog modulated channel carriers into a combined RF signal, as taught by Hamilton-Piercy, thus allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47) .

Consider claim 20, Kay teaches a method of transmitting RF signals between a remote unit and a base station (see abstract lines 1-5, col. 1 lines 15-20, and col. 9 lines 22-45). Kay teaches receiving simultaneous inbound RF signals from a plurality of mobile units at the remote unit (see, figure 3, col. 9 lines 22-45, col. 10 lines 2-27, where Kay discusses that the remote transmitting units are connected to the control units and the MSC via T1, digital lines). Kay teaches combining the inbound RF signals into a combined RF signal representing the inbound RF signals in a set of channels used by the remote unit; digitizing the combined RF signal; and transmitting the digitized combined RF signal to the base station (see col. 3 lines 35-67, col. 4

lines 2-33, col. 9 lines 22-45, col. 7 lines 55-67, and col. 8 lines 1-20, where Kay discusses outbound and inbound traffic between mobiles and base radio equipment, MSC, utilizing time slots, on the RF carrier and T1 connections between the remote transmitters and the base stations).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose combining the set of RF analog modulated channel carriers into a combined RF signal. Hamilton-Piercy teaches combining the set of RF analog modulated channel carriers into a combined RF signal (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and combine the set of RF analog modulated channel carriers into a combined RF signal, as taught by Hamilton-Piercy, thus allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47) .

Consider claim 21, Kay teaches a method of transmitting cellular telephone transmissions between a base station and a mobile unit (see abstract lines 1-5, col. 1 lines 15-20, and col. 9 lines 22-45). Kay teaches generating a digitized representation of a first RF signal at the base station, wherein the first RF signal is a combined analog signal representing all outbound cellular

telephone transmissions for a set of channels used by a cell remote from the base station transmitting the digitized representation to the cell (see, figure 3, col. 9 lines 22-45, col. 10 lines 2-27, where Kay discusses that the remote transmitting units are connected to the control units and the MSC via T1, digital lines). Kay teaches generating a second RF signal from the digitized representation of the first RF signal at the cell; and broadcasting the second RF site the mobile unit (col. 3 lines 35-67, col. 4 lines 2-33, col. 9 lines 22-45, col. 7 lines 55-67, and col. 8 lines 1-20, where Kay discusses outbound and inbound traffic between mobiles and base radio equipment, MSC, utilizing time slots, on the RF carrier and T1 connections between the remote transmitters and the base stations).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose combining the set of RF analog modulated channel carriers into a combined RF signal. Hamilton-Piercy teaches combining the set of RF analog modulated channel carriers into a combined RF signal (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and combine the set of RF analog modulated channel carriers into a combined RF signal, as taught by Hamilton-Piercy, thus

allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47) .

Consider claim 22, Kay teaches a method of transmitting RF signals between a base station and a plurality of mobile units (see abstract lines 1-5, col. 1 lines 15-20, and col. 9 lines 22-45). Kay teaches generating a set of RF analog modulated channel carriers representing outbound RF signals, wherein each RF analog modulated channel carrier corresponds in a one-to-one relationship, to a channel in a set of channels used by a remote unit; combining the set of RF analog modulated channel carriers into a first combined RF signal, wherein the first combined RF signal represents outbound RF signals; generating a digitized representation of the first combined RF signal at the base station; transmitting the digitized representation to the remote unit; generating a second RF signal from the digitized representation of the first RF signal at the remote unit; and broadcasting the second RF signal to the plurality of mobile units see, figure 3, col. 9 lines 22-45, col. 10 lines 2-27, col. 3 lines 35-67, col. 4 lines 2-33, col. 9 lines 22-45, col. 7 lines 55-67, and col. 8 lines 1-20, where Kay discusses outbound and inbound traffic between mobiles and base radio equipment, MSC, utilizing time slots, on the RF carrier and T1 connections between the remote transmitters and the base stations).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose combining the set of RF analog modulated channel carriers into a combined RF signal. Hamilton-Piercy teaches combining the set of RF analog modulated channel carriers into a combined RF signal (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-

67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and combine the set of RF analog modulated channel carriers into a combined RF signal, as taught by Hamilton-Piercy, thus allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47) .

Consider claim 23, Kay discloses a method of transmitting RF signals between a base station and a plurality of mobile units (see abstract lines 1-5, col. 1 lines 15-20, and col. 9 lines 22-45). Kay teaches receiving a plurality of outbound RF signals from a network, wherein the plurality of outbound RF signals correspond to a set of channels used by a remote unit (see, figure 3, col. 9 lines 22-45, col. 10 lines 2-27, where Kay discusses that the remote transmitting units are connected to the control units and the MSC via T1, digital lines). Kay teaches generating an RF analog outbound channel carrier for each channel in the set of channels used by the remote unit (see, figure 3, col. 9 lines 22-45, col. 10 lines 2-27, where Kay discusses that the remote transmitting units are connected to the control units and the MSC via T1, digital lines). Kay teaches analog modulating each of the plurality of outbound RF signals onto a corresponding one of the RF analog outbound channel carriers, thereby generating a plurality of RF analog modulated channel carriers combining the plurality of RF analog modulated channel carriers into a first combined RF signal; generating a digitized representation of the first combined RF signal at the base station; transmitting the digitized representation to the remote

unit; generating a second combined RF signal from the digitized representation of the first combined RF signal at the remote unit; and broadcasting the second combined RI, signal from the remote unit to the plurality of mobile units (see, figure 3, col. 9 lines 22-45, col. 10 lines 2-27, col. 3 lines 35-67, col. 4 lines 2-33, col. 9 lines 22-45, col. 7 lines 55-67, and col. 8 lines 1-20, where Kay discusses outbound and inbound traffic between mobiles and base radio equipment, MSC, utilizing time slots, on the RF carrier and T1 connections between the remote transmitters and the base stations).

Kay discloses the connection between the base controller and the transmitting unit, (figure 3), is a T1 digital carrier where it is well known that T1's can be carried over microwave, fiber, or coax via a plurality of analog modulated waves corresponding to the channels, however, does not specifically disclose combining the set of RF analog modulated channel carriers into a combined RF signal. Hamilton-Piercy teaches combining the set of RF analog modulated channel carriers into a combined RF signal (see 9 lines 5-25, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 6-67, col. 13 lines 10-40, and col. 16 lines 1-50, where Kay discusses connecting the base stations to the transmitters via coax, fiber, or microwave, therefore, analog combines carriers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Kay, and combine the set of RF analog modulated channel carriers into a combined RF signal, as taught by Hamilton-Piercy, thus allowing microcells to be used to extend the coverage of the system, as discussed by Hamilton-Piercy (col. 5 lines 37-47) .

Consider claims 11, the above combination discloses transmitting the digitized representation to a remote unit comprises transmitting the digitized representation to a remote antenna unit.

Consider claims 12, the above combination discloses generating a digitized representation of the RF signal comprises: sampling the RF signal to produce a stream of digital samples; and framing the digital samples to produce a stream of frames.

Consider claims 13, the above combination discloses transmitting the digitized representation to the remote unit comprises transmitting the digitized representation over a path selected from the group consisting., of a fiber optic cable and a coaxial cable.

Consider claims 15, the above combination discloses transmitting the digitized representation to a remote unit comprises transmitting the digitized representation to a remote antenna unit.

Consider claim 16, the above combination discloses a digitized representation of the RF signal comprises: sampling the RF signal to produce a stream of digital samples; and framing the digital samples to produce a stream of frames.

Consider claim 17, the above combination discloses transmitting, the digitized representation to the remote unit comprises transmitting the digitized representation over a path selected from the group consisting of a fiber optic cable and a coaxial cable.

3. Claims 24-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton-Piercy et al. (5,802,173) in view of Kay et al. (5,299,198).

Consider claims 24, 34, 39, 49, and 54, Hamilton-Piercy discloses a method of transmitting an RF signal between an optical node and a head end, the method comprising:

generating representation of the RF signal at the optical node, wherein the RF signal is a combined analog signal representing a plurality of transmissions for a set of channels; and transmitting the channels (see col. 9 lines 1-30, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 5-67, col. 13 lines 10-40, and col. 16 lines 5-50).

Hamilton-Piercy does not specifically disclose digitized representations. Kay teaches digitized representations (see col. 3 lines 35-67, col. 4 lines 3-35, col. 6 lines 45-68, col. 7 lines 25-67, col. 8 lines 1-20, col. 9 lines 22-45, col. 10 lines 1-67, col. 11 lines 1-40, and col. 12 lines 10-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hamilton-Piercy, and transmit digitized representation, as taught by Kay, thus allowing the system to be used for digital transmission, as discussed by Kay, (col. 3 lines 35-50).

Consider claim 29, and 44, A method of transceiving RF signals between a head end and at least one optical node, the method comprising: generating a representation of a first RF signal at the head end, wherein the first RF signal is a combined analog signal representing a plurality of transmissions for a set of channels; transmitting the representation to the optical node; receiving a second RF signal at the at least one optical node; generating a representation of the second RF signal at the optical node, wherein the second RF signal is a combined analog signal representing a plurality of transmissions for a set of channels; and transmitting the digitized representation to the head end (see col. 9 lines 1-30, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 5-67, col. 13 lines 10-40, and col. 16 lines 5-50).

Hamilton-Piercy does not specifically disclose digitized representations. Kay teaches digitized representations (see col. 3 lines 35-67, col. 4 lines 3-35, col. 6 lines 45-68, col. 7 lines 25-67, col. 8 lines 1-20, col. 9 lines 22-45, col. 10 lines 1-67, col. 11 lines 1-40, and col. 12 lines 10-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hamilton-Piercy, and transmit digitized representation, as taught by Kay, thus allowing the system to be used for digital transmission, as discussed by Kay, (col. 3 lines 35-50).

Consider claims 25, 40, 41, 45, 46, 50, 51, 55, and 56, Hamilton-Piercy does not specifically sampling the RF signal to produce a stream of digital samples. Kay teaches sampling the RF signal to produce a stream of digital samples (see col. 3 lines 35-67, col. 4 lines 3-35, col. 6 lines 45-68, col. 7 lines 25-67, col. 8 lines 1-20, col. 9 lines 22-45, col. 10 lines 1-67, col. 11 lines 1-40, and col. 12 lines 10-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hamilton-Piercy, and sample the RF signal to produce a stream of digital samples, as taught by Kay, thus allowing the system to be used for digital transmission, as discussed by Kay, (col. 3 lines 35-50).

Consider claims 26-28, 30-33, 35-38, 42, 43, 47, 48, 52, 53, 57, and 58, Hamilton-Piercy discloses a path selected from the group consisting of a fiber optic cable and a coaxial cable (see col. 9 lines 1-30, col. 10 lines 35-67, col. 11 lines 30-67, col. 12 lines 5-67, col. 13 lines 10-40, and col. 16 lines 5-50). Hamilton-Piercy does not specifically disclose digitized representations. Kay teaches digitized representations (see col. 3 lines 35-67, col. 4 lines 3-35, col. 6 lines 45-68,

col. 7 lines 25-67, col. 8 lines 1-20, col. 9 lines 22-45, col. 10 lines 1-67, col. 11 lines 1-40, and col. 12 lines 10-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hamilton-Piercy, and transmit digitized representation, as taught by Kay, thus allowing the system to be used for digital transmission, as discussed by Kay, (col. 3 lines 35-50).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(5,313,461), Ahl teaches digital RF, fiber coax, T1, cellular system.

5. Any inquiry concerning this communication should be directed to Nick Corsaro at telephone number (703) 306-5616.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth, Floor (Receptionist). Any inquiry of a general nature or relating to the status of this

application or proceeding should be directed to the Technology Center 2600 customer Service Office whose telephone number is (703) 306-0377.

Nick Corsaro

Primary Examiner

NICK CORSARO
PATENT EXAMINER